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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,820	12/04/2001	William C. Schneider	MSC-23178-1	9636

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EXAMINER

PECHHOLD, ALEXANDRA K

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 04/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/005,820

Applicant(s)

SCHNEIDER ET AL.

Examiner

Alexandra K Pechhold

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-10,12-14,16-22,24-37,44,45 is/are rejected.
- 7) ☒ Claim(s) 38-43 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. ³² **Claims 1-3, 5-10, 12-14, 16-22, and 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uotila (US 5,310,277) in view of Terio (US 4,780,020).**

Regarding claims 1, 5, 6, 10, 22, and 24, Uotila discloses a method and device for impeding motion of a land vehicle comprising:

- a net (or means for receiving and retaining the moving body), seen as net (1) in Figs. 1, 4, and 5
- anchors (or means for anchoring the receiving and retaining means), seen as anchors (3) in Figs. 1 and 4, and
- a flexible strip arranged to secure the net to the anchors (or means for decelerating the moving body in a controlled manner), seen as brakes (4, 5) in Figs. 1 and 4-7, which are described by Uotila as discardable fabric brakes formed of one or several ribbons which have been woven or stitched together over a certain length, so that ribbons are forced to be torn apart when pulled (Col 2, lines 40-65).

Uotila fails to disclose a first sacrificial panel, which includes a smooth surface on one side, and a second sacrificial panel, the first and second panels sandwiching the net therebetween. Terio teaches a vehicle barrier comprised of I-beam posts with cable therebetween to stop a high speed vehicle (see abstract). The barrier employs panels (40), which would not only make the gate more pleasing to look at but would hide the functioning components of the barrier from view to protect the from weather and scrutiny by potential terrorist (Col 5, lines 1-5). Two such panels would be employed between each pair of I-beams, one in front of the cables, on in back, between the cables and webs (2, 3), respectively (Col 5, lines 5-8). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the barrier of Uotila to include first and second sacrificial panels sandwiching the net therebetween as taught by Terio, since Terio states in column 5, lines 1-8 that the panels would not only make the gate more pleasing to look at but would hide the functioning components of the barrier from view to protect the from weather and scrutiny by potential terrorist, and two such panels would be employed, one in front of the cables, on in back.

Regarding claim 2, Uotila discloses that the brake members are formed of two ribs that have been woven or stitched together over a certain length, and they usually have two ends, on which draw members have been formed. Pulling on the draw members will cause the ribbons to be forced to be torn apart (Col 2, lines 40-51). Therefore, since the stitching breaks first, tearing apart the ribbons, the tensile strength of the stitching must be less than the tensile strength of the ribbons.

Regarding claim 3, Uotila discloses that the ribbons forming the fabric brakes

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have been woven or stitched together over a certain length (Col 2, lines 40-51), therefore the stitched and/or woven portions serving as the fasteners.

Regarding claims 8, 9, 12, 13, 27, and 28, Uotila discloses both a non-constant level of deceleration as well as a substantially constant level of deceleration in the action of the braking members (4, 5). Uotila notes that the first brake members are open, meaning that in conclusion of their operation the first brake members altogether cease to operate, and release their grip. The second brake members become locked in conclusion of their retarding effect, whereby the braking force increases to great height in the end (Col 2, lines 52-61). Therefore, it appears the first breaking members provide a substantially constant level of deceleration, and the second breaking members provide a non-constant level of deceleration since the braking force increases to great height in the end.

Regarding claims 7, 14, 16, 17, 21, 25, and 26, Uotila discloses a device for impeding motion of a land vehicle comprising:

- a first barrier, seen as net (1¹) in Fig. 9
- a second barrier, seen as net (1²) in Fig. 9, positioned alongside the first net, the first row being staggered from the second row (Col 3, lines 21-25)
- a plurality of anchors, seen as anchors (3) in Figs. 1 and 4
- each barrier comprising a net, seen as nets (1¹) and (1²) in Fig. 9, and one or more flexible strips arranged to secure the net to the anchors, seen as brakes (4, 5) in Figs. 1 and 4-7, which are described by Uotila as discardable fabric brakes formed of one or several ribbons which have

been woven or stitched together over a certain length, so that ribbons are forced to be torn apart when pulled (Col 2, lines 40-65).

Uotila fails to disclose a first sacrificial panel, which includes a smooth surface on one side, and a second sacrificial panel, the first and second panels sandwiching the net therebetween. Terio teaches a vehicle barrier comprised of I-beam posts with cable therebetween to stop a high speed vehicle (see abstract). The barrier employs panels (40), which would not only make the gate more pleasing to look at but would hide the functioning components of the barrier from view to protect the from weather and scrutiny by potential terrorist (Col 5, lines 1-5). Two such panels would be employed between each pair of I-beams, one in front of the cables, on in back, between the cables and webs (2, 3), respectively (Col 5, lines 5-8). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the barrier of Uotila to include first and second sacrificial panels sandwiching the net therebetween as taught by Terio, since Terio states in column 5, lines 1-8 that the panels would not only make the gate more pleasing to look at but would hide the functioning components of the barrier from view to protect the from weather and scrutiny by potential terrorist, and two such panels would be employed, one in front of the cables, on in back.

Uotila also fails to disclose a first row of barriers and second row of barriers positioned end-to-end (claim 14), with each barrier having a male portion and corresponding female portion of a mated joint (claim 21). Yet Uotila notes that it is obvious that any number of nets, such as may be considered necessary, can be placed one after the other (Col 3, lines 35-37). The nets are designed for greatest possible

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cover for use in stopping any passenger car that is in motion on the road (Col 4, lines 22-25). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the staggered nets in Fig. 9 of Uotila so there is a row of first and second barriers positioned end-to-end, and each barrier having corresponding male and female portions of a mated joint, since Uotila states in column 3, lines 35-37 that it is obvious that any number of nets, such as may be considered necessary, can be placed one after the other, and in column 4, lines 22-25 that the nets are designed for greatest possible cover for use in stopping any passenger car that is in motion on the road. So therefore if you have multiple side-by-side cars approaching the net, a row of barriers would be the logical solution in order to satisfy Uotila's desire for the greatest possible cover for use in stopping any passenger car that is in motion on the road, and clearly the barriers would have to be joined by some sort of mated joint. Furthermore, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Regarding claims 18 and 19, Uotila discloses both a non-constant level of deceleration as well as a substantially constant level of deceleration in the action of the braking members (4, 5). Uotila notes that the first brake members are open, meaning that in conclusion of their operation the first brake members altogether cease to operate, and release their grip. The second brake members become locked in conclusion of their retarding effect, whereby the braking force increases to great height in the end (Col 2, lines 52-61). Therefore, it appears the first breaking members provide a substantially constant level of deceleration, and the second breaking members

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provide a non-constant level of deceleration since the braking force increases to great height in the end.

Regarding claim 20, Uotila illustrates a plurality of support members mounted alongside the barriers, seen as posts (6) in Figs. 1 and 4.

Regarding claim 29, 30, 31, and 32, the combination of Uotila and Terio fails to disclose panels made of a thin layer of epoxy, concrete, or plywood, or combinations thereof. Terio fails to specify the material of panels (40). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Uotila having the panels of Terio so that the panels are made of a thin layer of epoxy, concrete, or plywood, or combinations thereof, since such materials are readily accessible and economical, and commonly used materials for panels.

Regarding claims 33, 36, and 44, Uotila discloses the limitations of the claimed invention as discussed in reference to claim 10 above. Inherently, the deceleration will be controlled, since the moving body encounters the effects of the receiving means, anchoring means, and means for decelerating the moving body. Also, the tensile strength of the stitches must be less than that of the strap, since Uotila states that the ribbons which are stitched together over a certain length are forced to be torn apart (Col 4, lines 40-51). Furthermore, the means for decelerating the moving body, which are seen as the fabric brakes (4, 5) in Uotila comprise at least one flexible, energy absorbing strap connected intermediate the receiving means and anchoring means, since Uotila discloses in column 2, lines 40-65 the construction and operation of the

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brake members, which may be composed of two ribbons that have been woven or stitched together over a certain length and are then forced to be torn apart.

Regarding claims 34 and 35, inherently the stitches in the brake members of Uotila will be ripped apart sequentially (Col 2, lines 40-65) due to the nature of the tearing action. And likewise, the stitches extending longitudinally along adjacent lengths of strap, since Uotila states that two ribbons have been woven or stitched together over a certain length (Col 4, lines 43-45).

Regarding claim 37, inherently the load capacity of the brake members of Uotila is the sum of the energy absorbing stroke of each stitch (Col 4, lines 43-45).

Regarding claim 45, Uotila discloses that the brake member may for instance be composed in that two ribbons have been woven or stitched together over a certain length (Col 4, lines 42-45). Pulling on the draw members will produce in the brake member a uniform braking force opposing the pull so that the ribbons are forced to be torn apart (Col 4, lines 46-49).

Allowable Subject Matter

3. Claims 38-43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments filed 3/5/03 have been fully considered but they are not persuasive.

Applicant has amended independent claims 1, 10, 14, and 22 to recite a first sacrificial panel, and cancelled the dependent claims that recited this limitation. The examiner is now rejecting these independent claims just as the dependent claims were rejected, using the teaching of Terio (US 4,780,020) in combination with Uotila (US 5,310,277). Applicant attempts to differentiate the teaching of Terio from applicant's sacrificial panel in that Terio is unconcerned with the safety of vehicle occupants and uses a non-constant rate of deceleration, whereas applicant's invention is geared toward providing a method to more slowly decelerate a vehicle so as to prevent injury to vehicle occupants. Applicant states that the goals of the applicant and Terio are directly contrary. While this may be true, and the applicant's arguments may have merit, the arguments are irrelevant though to the claims and beyond the scope of the claim language. The purpose, use, application, result, method of using, etc. of the sacrificial barrier are beyond the scope of the apparatus claims 1, 10, and 14. With respect to the method claim 22, as amended, the net of Uotila modified with the panel of Terio is certainly capable of deflecting moving bodies colliding tangentially therewith, and breaking away the first panel, depending on the size, speed, momentum, weight, etc. of the moving body as well as the strength of the panel.

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Conclusion

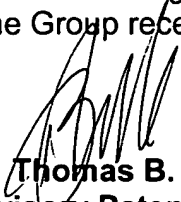
5. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexandra Pechhold whose telephone number is (703) 305-0870. The examiner can normally be reached on Mon-Thurs. from 8:00am to 5:30pm and alternating Fridays from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached on (703)308-3870. The fax phone number for this Group is (703) 305-3597.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.


Thomas B. Will
Supervisory Patent Examiner
Group 3600

AKP
4/10/03